

Paper Title: Overview of the QuikSCAT and SeaWinds on ADEOS II Missions

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The NASA Earth Observation System (EOS) comprises of a family of instruments which are intended to provide long-term monitoring of the earth's global environment and processes. As one component of EOS, the scatterometer measures near-surface vector winds over the ice-free global oceans. The ocean vector-wind measurement plays a crucial role in many oceanographic and meteorological investigations. Previous Ku-band scatterometers such as the NASA Scatterometer (NSCAT) launched in 1996 and SeaWinds on QuikSCAT (QSCAT) launched in 1999 have shown the utility and capability of wind measurements from space.

This paper will provide an overview on the present and future scatterometer missions and instruments. It will describe the QuikSCAT mission, which was launched in 1999, and the SeaWinds instrument on the Japanese Advanced Earth Observation Satellite II (ADEOS-II) scheduled to be launched in 2002. Concluding with a description of a proposed Ocean Vector Winds Mission.

The QuikSCAT mission is a "quick recovery" mission to fill the data gap created by the loss of ADEOS-I with the NASA Scatterometer (NSCAT) instrument on board. The mission was developed in 12 months with the Jet Propulsion Laboratory (JPL) providing project management, the scatterometer instrument and ground processing and NASA's Goddard Space Flight Center providing the satellite.

A second SeaWinds instrument is planned to fly on ADEOS-II with several other instruments including a Global Imager (GLI) and a multi-channel microwave radiometer (AMSR).